ABSTRACT

A circuit and method for receiving digital signals are disclosed. The circuit includes an input connected to a communications channel over which a digital signal is communicated and operates a plurality of multiple decision circuits at a frequency that is a fraction of the bit rate of the digital signal. A feedback and/or equalizer circuit receives the output of the decision circuits and applies a feedback signal to the input of the decision circuits that is representative of a combination of output signals of the decision circuits. The result is seen to improve the noise margin for correctly interpreting signals communicated over a communications channel having a low-pass characteristic.